

United States Department of the Interior
Bureau of Land Management



Information Resources Management
Strategic Plan
2002 - 2005



May, 2002

Table of Contents

EXECUTIVE SUMMARY	Attachment 2 -1
1.0 BLM MISSION	Attachment 2 -2
1.1 THE IRM MISSION	Attachment 2 -2
1.2 THE IRM VISION	Attachment 2 -2
1.3 INTRODUCTION	Attachment 2 -3
1.4 PURPOSE AND SCOPE	Attachment 2 -5
1.5 INFORMATION RESOURCE PLANNING ASSUMPTIONS	Attachment 2 -6
1.6 MEASUREMENT and ASSESSMENT of PERFORMANCE	Attachment 2 -6
2.0 IRM STRATEGIC GOALS	Attachment 2 -8
Goal 1: Improve Management of Information Technology Assets	Attachment 2 -8
Goal 2: Enhance the Transformation of Data into Knowledge	Attachment 2 -8
Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital	Attachment 2 -8
2.1 RELATIONSHIP BETWEEN IRM GOALS and BLM's STRATEGIC GOALS	Attachment 2 -9
3.0 IRM STRATEGIC PLAN GOALS AND OBJECTIVES	Attachment 2 -10
3.1 ACHIEVING OUR GOALS	Attachment 2 -12
Goal 1: Improve Management of Information Technology Assets	Attachment 2 -12
Objective 1: Develop a secure information technology architecture	Attachment 2 -12
Objective 2: Improve the Capital Planning and Investment Control Process	Attachment 2 -14
Objective 3: Improve Cost Management and Budgeting for IT Assets and Activities	Attachment 2 -16
Objective 4: Ensure safeguards are in place to protect BLM's data and information technology investments	Attachment 2 -18
Goal 2: Enhance the Transformation of Data into Knowledge	Attachment 2 -21
Objective 1: Incorporate information management principles and procedures into the BLM's work processes	Attachment 2 -21
Objective 2: Develop and maintain corporate information that supports the BLM business processes by increasing the adoption and use of common standards, metadata, and other protocols.	Attachment 2 -23
Objective 3: Ensure proper handling of BLM's Official Agency Records.	Attachment 2 -25
Objective 4: Increase access to data and information via the internet to support both internal and external customers	Attachment 2 -27
Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital	Attachment 2 -28
Objective 1: Improve business operations by thoroughly understanding business needs and by planning, implementing and managing the best information technology solutions available	Attachment 2 -28

Objective 2: Recruit and retain skilled IRM personnel competent in both current and emerging technologies	Attachment 2 -29
Objective 3: Provide easy to use decision-support tools to all BLM employees that enhance the transformation of data to knowledge	Attachment 2 -30
Objective 4: Provide vision, leadership, and a framework for evaluating emerging technologies and implementing proven information technology solutions	Attachment 2 -32
Objective 5: Provide citizens, external customers, and BLM staff with convenient access to appropriate information and services through technology	Attachment 2 -33
Objective 6: Operate a reliable communication and computer infrastructure on which to efficiently conduct BLM business operations today and in the future	Attachment 2 -35
Objective 7: Develop and maintain a user community that understands and can employ modern technologies to maximize business benefits	Attachment 2 -36
APPENDIX A:	Attachment 2 -37
BLM ORGANIZATION	Attachment 2 -37
IRM ORGANIZATION	Attachment 2 -37
IRM Responsibilities and Authorities	Attachment 2 -38
The Role of BLM's Chief Information Officer (CIO)	Attachment 2 -38
APPENDIX B:	Attachment 2 -40
DEFINITIONS	Attachment 2 -40
APPENDIX C:	
GLOSSARY OF ACRONYMS	Attachment 2 -42

EXECUTIVE SUMMARY

This Information Resources Management (IRM) Strategic Plan has been drafted to support the Bureau's overall Strategic Plan and implementation of the Bureau's Enterprise Architecture (BEA) and may be modified to address any changes that may be made to those documents. Our customers now expect universal access to information to a degree never before provided by the Bureau of Land Management (BLM), including spatial displays, and more timely processing of requests. The actions outlined in this plan are designed to meet those expectations. Furthermore, this plan is designed to provide the direction and contain the flexibility to support the Secretary's Management Reform Action Plan to move the Department of the Interior (DOI) to consolidation of information technology, procurement and personnel activities to improve delivery of information, increase our capability to procure goods and services more effectively and enhance our human capital management.

The plan emphasizes:

- implementing an integrated enterprise architecture to support the Bureau's core business of restoring and maintaining the health of the land,
- improving cooperation, consultation and communication in the service of conservation to serve current and future publics by providing information and services electronically to our external customers and our own organization;
- promoting collaborative leadership by using data available from other sources and sharing our databases with others;
- serving current and future publics by implementing data standards and posting metadata, and
- maximizing human capital by employing, training and retaining a highly skilled workforce.

This plan is comprised of three goals, followed by objectives, desired outcomes, performance measures, and specific actions that will be taken during Fiscal Years 2002 through 2005, to accomplish the goals. The duration of this plan has been selected to bring the IRM planning cycle into coincidence with the BLM Strategic Plan which covers the period 2000-2005.

The three IRM goals focus on:

- Technology -- its acquisition (goal 1) and implementation (goal 3);
- Data and information -- its access, use, maintenance, protection, and disposition (goal 2), and
- People and Process -- serving customers and hiring, training, and retention of capable employees (goal 3).

Included under each objective is a section identifying measurements that will be used to judge the effectiveness of the actions to be taken in achieving the goals and objectives of the plan. At the action

level, the plan identifies responsible parties as well as action dates. Many of the actions needed to achieve the objectives are significant undertakings in their own right. Where appropriate, individual activity plans will be developed to guide and ensure successful completion of those actions.

1.0 BLM MISSION

It is the mission of the BLM to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. *(From BLM Strategic Plan 2000-2005)*

1.1 THE IRM MISSION

IRM is responsible for supporting the BLM's mission by facilitating the development and implementation of business solutions among its State/Field Offices, National Centers, and the Headquarters Office. IRM will focus on providing value added support and services to meet customers' expectations, while ensuring information technology investments effectively support the BLM's core business goals by linking investments to the attainment of the BLM's Strategic Plan performance goals.

1.2 THE IRM VISION

Using Information Technology to make information and services available when and how they are needed by our customers for their business solutions.



1.3 INTRODUCTION

The BLM, an agency of DOI, is responsible for managing 264 million acres of surface lands and approximately 700 million acres of federally owned mineral estate nationwide. Furthermore, the BLM has cadastral and mineral-related technical service responsibilities on 56 million acres of Indian Trust lands. A series of land management statutes, culminating in the Federal Land Policy and Management Act of 1976, mandate that the BLM manage these lands and related resources for the benefit of the people of the United States and future generations. The BLM increasingly relies on information technology to assist in its efforts to carry out these responsibilities. This IRM Strategic Plan describes the direction the BLM will take to manage its information resources over the next four years.

Combined with 25 years of management experience under FLPMA, the explosive growth of the Internet and use of PCs in over 40 percent of all homes in the United States, expectations of our employees, citizens, and businesses that do transactions with the BLM have significantly changed.

Two of the hallmarks of the Information Age are: the universal access to information and ‘information velocity.’ Many businesses have realized what makes customers choose one company over another is speed and accessibility of their information (being able to get information at any time, 24-hours a day, 7 days a week). Customers are simply seeking the best information possible in the fastest possible time. The keystone of success in the Information Age is the ability to add value to outputs by being able to quickly transform data and records into useful information, and make that information widely accessible.

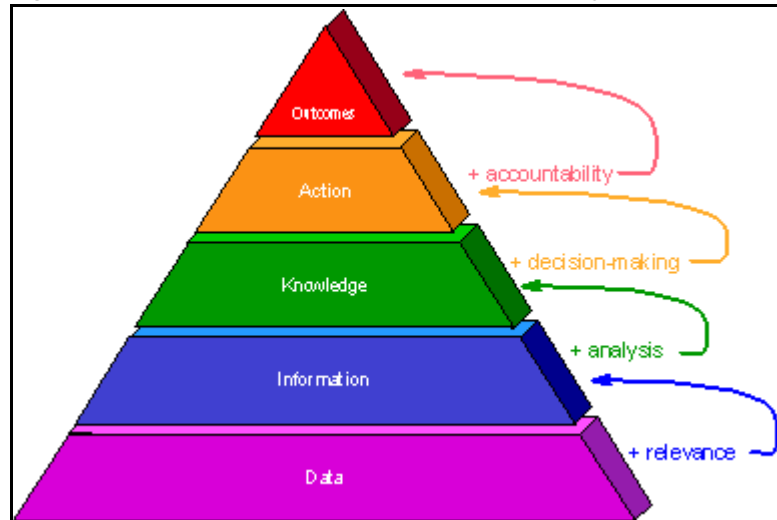
Therefore, organizations that have successfully made the transition to the 21st century do not conduct business either internally with their employees nor externally with their customers in the same way now than they did before. In the private sector, these trends are being addressed by developing new and/or modified business processes and innovative uses of technology, as organizations recognize that information and services and the speed with which they are delivered are indeed an asset, as well as being able to rapidly adapt to changing business needs. These entities also recognize that they must provide universal electronic access to their business information at such times as their customers need it.

The BLM collects, analyzes, and records a tremendous amount of business information about the public lands and resources, ranging from land title to recreational usage to wildlife habitat. Much of this data is geographic in character and is best understood when displayed and analyzed in spatial form using automated geographic information systems. This data/information is used to make thousands of business decisions each year. We recognize that this business information is of great utility and value to a wide variety of other parties, including public land users; educational institutions; countless public interest groups; other Federal, State, Tribal, and local agencies; and the scientific community.

Adding Value to Data

Figure 1 illustrates how successful organizations now add value to information. The successful organization collects its business data and adds relevance to the data to transform it into information. Information is then analyzed to produce knowledge which is then used for decision-making leading to actions. Once accountability is assigned to actions, outcomes are generated by the organization. It is clear that those organizations that view information as a major asset do add substantive value at each step of this process.

Figure 1. Value Added Chain for Data in the Information Age



“Information velocity”

“Information velocity” is a new term of the Information Age. In the late Industrial Age (1970's and 1980's), business cycle times were on the order of seven years. In the late 1990's, and into the 21st Century, cycle times for information change are expected to be on the order of 12-18 months. Clearly, the speed of change is accelerating. Information velocity is a measure of how fast data is collected, transformed from data into information, processed by the organization, and action taken to make results available to the public. Information velocity and universal access will be increasingly important factors over the next five years.

Transforming Data into Useful Information

To assure success in the Information Age we must manage data in a structured way. Data must be collected to a common standard in order to be reliable, current, and relevant. These attributes are the key to sharing, linking, and ultimately, integrating data and information from various sources to gain knowledge needed to address issues facing the organization. In the governmental sector, this enables the BLM to:

- form partnerships to obtain and exchange basic information among agencies at all levels, and with other knowledgeable parties (which will reduce costs of repetitive data collection);
- provide information to the public to indicate where and how the agency is achieving its mission (the public's ‘right-to-know’), and

- collaboratively find and implement creative, lasting, supportable, solutions to pressing public issues.

However, a barrier exists to effectively achieve the goals described above. We collect identical data to different standards because:

- few nationwide BLM data standards have been established and followed;
- the more than 50-year evolution of the BLM's legislative mandates and programs, built on top of the additional 150-year history of its predecessor agencies, such as the General Land Office, caused great variation in the data collected over time;
- data has historically not been viewed as a fundamental corporate asset of the BLM;
- data collection and management have traditionally been a local, field decision, and
- prior to 2000, an enterprise-wide analysis of work processes and information flows had never been done.

To meet these expectations, the BLM must provide a significantly higher degree of public access to our data and services. These issues are not restricted only to the BLM. In fact, the *Government Paperwork Elimination Act of 1999* requires that: "...commencing not later than five years after the date of enactment of this Act, Executive agencies provide; (1) for the option of the electronic maintenance, submission, or disclosure of information, when practicable as a substitute for paper; and (2) for the use and acceptance of electronic signatures, when practicable."

Investments in information systems throughout the BLM will be implemented through phased or sequential development and implementation. These investments are approved for acquisition or development based on their contribution to improving the BLM's core business processes and on priorities identified by the BLM, the DOI and the Office of Management and Budget (OMB). The central focus of this strategy is to develop integrated systems that help the BLM meet national and local needs in the management of the lands and natural resources, while supporting the mission and goals outlined in the BLM Strategic Plan. Specific performance goals contained in the BLM's Strategic Plan relate directly to IRM. The strategies and actions to achieve those performance goals are the foundation of this document.

1.4 PURPOSE AND SCOPE

The IRM Strategic Plan describes the BLM's IRM approach for the years 2002 through 2005. This plan provides policy and direction for planning the BLM's information resource investment to

support the BLM's mission and goals and to meet the IRM goals of the DOI. This plan is to be used as a basis for preparing the State and Center IRM plans and for decisions affecting the acquisition and management of information resources.

The BLM managers who use this plan when making decisions that affect information and technology resources include the:

- the BLM Information Technology Investment Board (ITIB), chaired by the Director;
- Assistant Director for IRM, who is the BLM's Chief Information Officer (CIO);
- Assistant Directors, State and Center Directors, who direct the implementation of information and technology resources, and
- State and National Center CIOs and ITIBs responsible for operational implementation in direct support of the BLM's mission.

1.5 INFORMATION RESOURCE PLANNING ASSUMPTIONS

The following planning, management, and technology assumptions have been made in developing this Strategic Plan:

- the DOI will consolidate many of the information technology acquisitions and services currently provided by the individual Bureaus;
- the BLM customers expect reliable electronic access to more of the BLM's information and services to apply for permitted uses of the public lands, verify land ownership, and conduct research on the state and trends of the health of the land;
- the implementation of electronic Government will continue to be an Administration priority;
- our customer base will have broader expertise and will reside in a wider geographic area than we have traditionally served;
- knowledge needed to serve customers will often reside outside the BLM in partners;
- employee expertise will be widely distributed, both organizationally and geographically;
- a retiring workforce represents a potential loss of existing information and knowledge;
- a retiring workforce, and its knowledge, will be difficult to replace;

- a baseline of historical spending will be established against which future spending will be controlled, and
- information technology investments must be carefully planned and executed to directly improve the productivity, efficiency, and effectiveness of business processes that will achieve the performance and business goals of the BLM.

1.6 MEASUREMENT and ASSESSMENT of PERFORMANCE

The BLM is committed to objective and systematic measurement of its performance as a tool for tracking progress toward attaining its goals and as a means of identifying opportunities for improvement. This plan is designed to enable the BLM to implement the fundamental practices found in the U.S. General Accounting Office (GAO), Accounting and Information Management Division, *Executive Guide, Measuring Performance and Demonstrating Results of Information Technology Investments*, Washington, D.C., GAO 1998, GAO/AIMD-98-89. The GAO considers IT performance management and measures to be **subsets** of overall performance management systems. In structuring an effective approach to performance management it is important to:

- differentiate between IT's impact on intermediate versus final program outcomes;
- use a good balance of different kinds of IT measures;
- understand that measures may differ by management tier within an organization, and
- evaluate both the overall performance of the IT function within an organization and the outcomes for the individual IT investments.

The Government Performance and Results Act of 1993, the Paperwork Reduction Act of 1995, and the Clinger-Cohen Act of 1996, all require that agencies take steps to significantly improve the management of their information systems and the acquisition of IT after completing business process reengineering. These laws require that assessments be made of the effectiveness of the programs and systems used by Federal agencies. The CIO will monitor and evaluate the performance of information resources using established accounting procedures and auditing practices.

To accomplish this, the BLM will:

- for each action item identified in this plan, assign a lead responsible party who will develop a schedule for completion of the action and report progress to the CIO quarterly;

- develop and implement a performance measurement plan that will address the following practice areas adopted from the GAO, Accounting and Information Management Division, *Executive Guide, Measuring Performance and Demonstrating Results of Information Technology Investments*, Washington, D.C., GAO 1998, GAO/AIMD-98-89:

Practice Area 1: Follow an IT “Results Chain”

Practice Area 2: Follow a Balanced Scorecard Approach

Practice Area 3: Target Measures, Results, and Accountability at Different Decision-making Tiers

Practice Area 4: Build a Comprehensive Measure, Data Collection, and Analysis Capability

Practice Area 5: Improve Performance of IT Business Processes to Better Support Mission Goals;

- periodically review the appropriateness and effectiveness of IRM policies to achievement of the BLM’s goals and core business practices;
- conduct risk assessments of its infrastructure and key systems to guard against service interruption and loss or compromise of data;
- evaluate the performance of major BLM systems to determine their effectiveness in meeting the BLM’s business requirements and seek to determine the actual return on investment;
- solicit and respond to feedback from our customers to ensure our information services meet their needs and identify areas in which additional services/information may be needed;
- analyze the BLM's IT investments to determine whether the investment in new technology is the result of reengineered business processes, is cost effective with an acceptable level of risk, meets the BLM’s business requirements, and conforms with the principles of the Clinger-Cohen Act of 1996;
- review its IT support structure to ensure that it meets the needs of the BLM offices and conforms with the Secretary’s initiative for competitive sourcing, and
- ensure the BLM is making satisfactory progress implementing the desired enterprise architecture.

The results of assessments will be used to gauge the effectiveness of the IRM Strategic Plan, and will provide the basis for adjusting the plan to further improve the BLM's information resources.

2.0 IRM STRATEGIC GOALS

IRM STRATEGIC GOALS

Goal 1: Improve Management of IT Assets

The selection of IT investments will be based on quantified and verifiable criteria directly related to the support of the BLM's mission and in accordance with the BEA. The BLM will strive for cost savings in the acquisition and operation of assets while maintaining quality and currency of its hardware and software. The acquisition, development, testing, and deployment of investments will be controlled and managed as projects. Deployed investments will be evaluated periodically to assess cost and mission effectiveness.

Goal 2: Enhance the Transformation of Data into Knowledge

Procedures and standards will be established and implemented that govern the creation, protection and interpretation of data that is used for making knowledgeable decisions affecting the achievement of the BLM's mission. Knowledgeable and documented decisions are the essential end result of information management. A clear and common understanding of the meaning of information derived from the data and its metadata is essential to its transformation into knowledge.

Goal 3: Support the BLM's Mission by Increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

IT investments, in and of themselves, are of no value to the BLM or the citizens. It is the use of those investments by skilled employees and citizens that deliver value to the organization and the American public. The BLM will ensure that its investments effectively enhance service delivery by making them relevant, comprehensive in their utility, and intuitive to use; educating its workforce and the customer whenever necessary.

2.1 RELATIONSHIP BETWEEN IRM GOALS and the BLM's STRATEGIC GOALS

The following table illustrates the relationship between the BLM's IRM goals and the mission goals identified in the BLM's Strategic Plan for FY 2000 through 2005. An "N" indicates the IRM goal is necessary to achieve that BLM Mission goal. An "F" indicates the IRM goal facilitates the achievement of that Strategic goal.

BLM IRM Goals	<i>Improve Management of Information Technological Assets</i>	<i>Enhance the transformation of Data into Knowledge</i>	<i>Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital</i>
BLM Strategic Goals			
Serve current and future publics	N	N	N
Restore and maintain the health of the land	F	N	F
Management Strategies to Improve Organizational Effectiveness	N	N	N

3.0 IRM STRATEGIC PLAN GOALS AND OBJECTIVES

The fulfillment of these IRM Goals during the next four years will enable the BLM to attain its strategic business goals by enabling the reengineering of business processes.

IRM STRATEGIC PLAN GOALS AND OBJECTIVES	
Goal 1: Improve Management of IT Assets	
Objective 1	Develop a secure IT architecture responsive to changing business requirements and technologies.
Objective 2	Improve the capital planning and investment control process.
Objective 3	Improve cost management and budgeting for IT assets.
Objective 4	Ensure that safeguards are in place to protect the BLM's data and IT investments.
Goal 2: Enhance the Transformation of Data into Knowledge	
Objective 1	Incorporate information management principles and procedures into the BLM's business processes.
Objective 2	Develop and maintain corporate information that support the BLM business processes by increasing the adoption and use of common standards, metadata, and other protocols.
Objective 3	Ensure proper handling of the BLM's Official Agency Records.
Objective 4	Increase access to data and information via the internet to support both internal and external customers.

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital	
Objective 1	Improve business operations by thoroughly understanding business needs and by planning, implementing, and managing the best IT solutions available.
Objective 2	Recruit and retain skilled IRM personnel competent in both current and emerging technologies.
Objective 3	Provide easy to use decision-support tools to all BLM employees that enhance the transformation of data to knowledge.
Objective 4	Provide vision, leadership, and a framework for evaluating emerging technologies and implementing proven IT solutions.
Objective 5	Provide citizens, external customers, and BLM staff with convenient access to appropriate information and services through technology.
Objective 6	Operate a reliable communication and computer infrastructure on which to efficiently conduct BLM business operations today and in the future.
Objective 7	Develop and maintain a user community that understands and can employ modern technologies to maximize business benefits.

3.1 ACHIEVING OUR GOALS

Goal 1: Improve Management of IT Assets

Objective 1: Develop a secure IT architecture responsive to changing business processes and technologies.

The BLM seeks to create and implement an enterprise architecture that provides secure access to the BLM information and institutionalizes the integration of the architecture with IT investment management, including capital planning investment procedures. The BLM is following the Federal CIO Council's guidance in documenting its current architecture and defining a target architecture with accompanying transition plans to migrate from the current to target. The BLM's target architecture will evolve over the next several years and identify areas to improve data sharing through enterprise information data stores and promote reusability of program logic for reduced application development costs. The objective is to create an environment in which appropriate access to information is available to any BLM employee or customer, regardless of the computer system he/she is using and with minimal interruption or adjustment for changes in format, hardware, or software. The following products and actions will move us toward achieving the desired outcomes.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Adherence of technology acquisitions to a comprehensive and flexible architecture</i>	Percent of existing assets conforming to the architecture	20%	30%	40%	50%
<i>Reduced number of single purpose systems</i>	Number of stand alone national systems	Base-Line	-10%	-10%	-10%
Product	Action/Method	Responsible Party			Date
Configuration Management (CM) Manual and Handbook	Consolidate and update CM guidance.	ADs SDs CDs			FY-02
Target Enterprise Architecture defined	Evolve the definition of the Enterprise Architecture to capture reengineered/improved business processes, data models, planned future applications and technology architectures.	AD-IRM NIRMC CIOC BEA Core Team Technical Review Board (TRB)			FY-02-05

Annually updated Technical Reference Model (TRM).	Involve CIOC, TRB and OIRM in assessment of current and target standards and products for integration into the information technology architecture.	AD-IRM TRB CIOC	FY-02-05
Approved use of classified and emerging technologies	Apply classified technologies to assist in land management.	AD-IRM AD-200 AD-300	FY-02 -05
	Seek de-classification of information and technology to assist in land management.	AD-IRM	FY -02 -05
	Apply emerging technologies including hand-held computers to help BLM personnel gather and store data.	AD-IRM	FY -02 - 05

Goal 1: Improve Management of IT Assets**Objective 2: Improve the Capital Planning and Investment Control Process**

The GAO has developed a model that recognizes five stages of an organization's ability to manage its IT investments. Stage 5 is the highest level of maturity characterized by an organization that is enterprise and strategically focused and has comprehensive policies and procedures that are adhered to. The BLM will use this model to improve its investment management processes and measure itself against this model to assess progress. A part of the GAO model includes software acquisition. The Software Engineering Institute (SEI) at Carnegie Mellon University has developed a model that identifies the characteristics that represent five levels of an organization's maturity for developing and otherwise acquiring software. The BLM will use this model to fashion its organizational activities to achieve each of those levels up to and including the highest level.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Increased cost effectiveness of IT investments</i>	Dollars saved by consolidated purchases and other means as measured against GSA schedule or list price	\$1m	\$2m	\$3m	\$4m
	Return-On-Investment (ROI) reviews completed on at least two significant investments calculating an average ratio of projected to actual ROI	ratio of 0.5	ratio of 0.8	ratio of 0.9	ratio of 1.0
	Certification	Stage 2	Stage 3	Stage 4	Stage 5
	Percent of IT services contracts that are performance based	50%	85%	90%	95%
Product	Action/Method	Responsible Party			Date
Certification Achievement Plan	Develop and implement a plan to achieve certification at each GAO stage	WO-550			FY-02
<i>Independent certification for:</i> IT Investment Board Operation	Establish and comply with ITIB operating procedures	ITIB			FY-02
	Perform an analysis of the effectiveness of IT investments	WO-550			FY-03

IT Project Oversight	Federal CIO Council (Fed CIOC) review of the BLM's investment practices	Fed CIOC	FY-02
	Review projects in select, control and evaluate stages	ITIB, WO-550 & WO-570	quarterly
	Develop and implement a performance measurement plan that will address the GAO's five practice areas	AD-500	annual
IT Asset Tracking	Develop a portfolio of IT assets and populate a portfolio management tool	WO-550 develop System Owners implement	National & State FY-02
	Conduct oversight of portfolio performance	WO-550	annual
Business Needs Identification for IT Projects	Document standards for business needs identification for projects in Manual/Handbooks	WO-570 develop AD, SD, CD implement	FY-02
IT Proposal Selection	Document IT proposal/selection criteria in Manual/Handbooks	WO-570 develop National & State ITIB implement	FY-02
Self assessment of SEI level achievement	Develop and implement an achievement plan for each key process area	WO-570	FY 02-05

Goal 1: Improve Management of IT Assets

Objective 3: Improve Cost Management and Budgeting for IT Assets and Activities

The BLM is committed to performance based budgeting and has established an annual limitation on the amount of funds that will be expended on IT. Successful implementation of these policies depends upon the ability to accurately baseline and track costs and relate those costs to performance planned and achieved.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Improved accounting of IT expenditures</i>	Confidence in completeness and accuracy of IT cost accounting based on CFO and ITIB approval	baseline	+10%	+10%	+10%
<i>Comprehensive planning for IT expenditures</i>	Adherence to the IT spending limit established by the Budget Strategy Team	+ - 10%	+ - 5%	+ - 5%	+ - 5%
<i>Efficient use of limited funds</i>	Savings resulting from consolidated purchases and other means	\$6m	\$6m	\$7m	\$7m
<i>Achievement of Narrowband radio use mandate</i>	Adherence to Narrowband radio transition spending plan	\$9m	\$9m	\$9m	complete
Product	Action/Method	Responsible Party			Date
Quarterly reports of IT expenditures	Incorporate all DOI budget object cost codes relating to IT into the BLM accounting system	AD-800			2002
	Record data accurately	All Offices			2002
	Analyze data and report Quarterly to the CIO	WO-550, SD & CD			2002
Activity Based Costing implemented at the IRM program level	Determine activities requiring cost tracking	AD-500			2002
	Develop a method for coding IRM activities regardless of mission activity	AD-800			2002

	Record data accurately	All Offices	2003
	Analyze data and report Quarterly to the CIO	WO-550, SD & CD	2003
Annual IRM budget requests based on performance and costs	Analysis of historical ABC data from MIS	WO-550 SD, CD	FY 2003
	Analysis of investment proposal data	WO-550 SD, CD	FY 2002
Accurate out year budget requests	Develop a Life Cycle Cost Model for BLM's IT investments	WO-550	FY 2003
	Develop a three-year funding strategy for investments	WO-550	FY 2003
Standard radios/ communication (Narrowband)	Plan, schedule, and implement Narrowband Radios throughout the BLM.	WO-560 SD, CD	FY 2002 through 2005
Increased contracted services	Implement competitive sourcing decision criteria to selected IT service areas	All AD's SD, CD	FY 2002 through 2005

Goal 1: Improve Management of IT Assets

Objective 4: Ensure safeguards are in place to protect the BLM's data and information technology investments.

The BLM must ensure that its IT infrastructure is adequately protected against threats to the physical network and the data and systems residing on it. DOI will implement Department-wide computer security requirements for all National Critical Infrastructure Systems, National Security Information Systems, and the most significant DOI Mission Critical Systems during FY 2002, based on an asset valuation by DOI managers. Included in DOI Mission Critical Systems are Indian Trust Management and Financial Management systems. This approach adopts the Federal doctrine that application of computer security measures should be risk based, implemented uniformly and consistently, applied commensurate with the potential for loss, and quantifiable measurement.

DOI has adopted the CIO Council's Federal IT Security Assessment Framework to measure the success of the IT security program. The BLM will meet or exceed the DOI schedule for compliance.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Prevention of service disruption</i>	Unscheduled Network down time	2%	1.5%	1%	0.75%
	Time from virus data tables availability to 100 percent installation	base-line	-10%	-10%	-10%
	Management Control Findings reduction of non-material weaknesses	base-line	-20%	-30%	- 40%
<i>Systems meet Federal CIO Council Framework Guidelines</i>	Certification of compliance with Federal IT Security Assessment Framework for:				
	National Critical Infrastructure Systems,	level 2 and 3	-	level 4	level 5
	National Security Information Systems,	level 2 and 3	-	level 4	level 5

	BLM Mission Critical Systems	33% at level 2 and 3	80% at level 2 and 3	level 4	level 5
Product	Action/Method	Responsible Party			Date
IT Security Program Plan	Develop an IT Security Program Plan specifying security implementation under the Departmental (Interior Information Architecture) guidance	WO-560			FY 2002
Standards for minimum acceptable risk for major systems developed and implemented	Establish and determine security requirements from the business perspective	WO-560 develop SD, CD, System Owners implement			FY 2002
	Develop and implement a risk assessment plan				
Security and risk mitigation implementation plans	Develop security plans/ implementation schedules to secure systems Bureauwide.	WO-560 develop Bureauwide plan System Owners develop system security plans & implement			FY 2002
Continuity of operations plans (COOPs) for all major systems	Develop contingencies to ensure major systems are operating.	AD-IRM SDs System Owners			FY 2002
100 percent of the Intranet perimeter network access points are protected by firewall and network control devices (DOI IT plan)	Test Intranet perimeter	WO-560			FY 2002
	Map the current telecommunications topology				
	Implement the Intranet security program				

100 percent of security policies, procedures, and implementation guidance's are documented (DOI IT plan)	Issue the BLM revised Security Manual and Handbook	WO-560	FY 2003
100 percent of systems within the Intranet conform to Department-wide IT security requirements (DOI IT plan)	System Owners certify compliance with DOI requirements	System Owners comply WO-560 validate	FY 2004
Investment proposal business case and OMB Exhibit 300s address security issues and costs	Document ITIB operating procedures requiring proposals to adequately address security risks and mitigation costs before approval in Manual/Handbook	WO-560 & 570 develop, Project Managers implement	FY 2002
Privacy Act determination for systems, data, and records	Analyze and determine which systems, data, and records are subject to Privacy Act controls.	WO-560 & System Owners	FY 2002
Security training completed	Implement a training program to enable successful security program implementation for BLM's managers, auditors, security managers, system administrators, and system users	WO-560 NTC	FY 2003 & annual

Secure credentialing system for BLM	Prototype and implement Smart Card for secure user logical and physical access, and trusted PKI credential store to enable: ID badge, Building access, Logical access to user's local desktop and enterprise network, secure storage of PKI credentials, secure e-mail, secure web access, secure VPN (remote user access to network), and secure document and form signing.	WO-800 and WO-500	FY2003
-------------------------------------	---	-------------------	--------

Goal 2: Enhance the Transformation of Data into Knowledge

Objective 1: Incorporate information management principles and procedures into the BLM's work processes

This objective lays the groundwork for having our managers in all disciplines apply principles for managing data and information as a part of doing business. This also includes having procedures in place to ensure the BLM's information resources are effectively and efficiently managed. The following products and actions will move us toward achieving the desired outcomes.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Demonstrate commitment to data standards for more effective mission performance</i>	Expand number of assigned Data Stewards toward target	50%	75%	90%	100%
<i>Reduced time to acquire data for the BLM decision making</i>	Data gathering, input, access, and analysis is fully automated	25%	50%	75%	80%
Product	Action/Method	Responsible Party		Date	
Data Management Plan	Develop data management procedures and conduct training on their application	AD-200 AD-500		FY 03	
Data Stewardship responsibilities documented in Position Descriptions	Identify existing and potential Data Stewards for all Programs	ADs		FY 03	

IT Implementation Plan to Support the Data Management Plan	Develop an IT Plan that delivers the means to automate data at all levels of the BLM	AD-500	FY 03
IT Plan to Support implementation of a Web-based strategy for Information Sharing	Develop an IT Plan that delivers BLM data and information on the web for internal and external use	AD-500	FY 03
Training Plan	Provide training to all levels of the organization to support this objective.	ADs, SDs, CDs, and FOMs	FY 02
Roles and responsibilities added to Program Leads & Manager's position descriptions	Directive to managers to assign clear responsibilities and provide training	ADs, SDs, CDs, and FOMs	FY 02

Goal 2: Enhance the Transformation of Data into Knowledge					
Objective 2: Develop and maintain corporate information that supports the BLM business processes by increasing the adoption and use of common standards, metadata, and other protocols.					
<p>Common standards are needed to communicate within the BLM and ensure the information in the BLM's databases is known and defined to its customers. This objective is designed to ensure the program areas concerned with carrying out the BLM's mission have the data and tools needed to get accurate and understandable information. The development of data definitions and standards is the responsibility of the BLM program organizations and individuals who manage and use the data. Information resource professionals can ensure that consistent standards are documented and made available to staff. Standardized data allow resource programs to improve sharing of information and databases with others and provides a basis for tracking changes in the data over time.</p>					
Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Decisions supported by repeatable and maintained BLM Corporate Data</i>	Percent of BLM Data conforming to Corporate Data Standards	25%	50%	75%	100%
<i>Decisions based on BLM Corporate Data, on Adaptive Management and Public Involvement</i>	Percent of new Resource Management Plans developed with Public involvement via web-based interaction	25%	50%	75%	100%
	Percent of new Resource Management Plans designed to be maintained via periodic update and review of the BLM Corporate and publicly available data	25%	50%	75%	100%
Product	Action/Method	Responsible Party		Date	
Approved data standards for the BLM program areas	Assist programs in developing standard data elements for information systems.	ADs, SDs, CDs & FOMs		FY 03	
The BLM Corporate Metadata Repository	Agree and adopt standard data elements and document the results.	ADs SDs Director/DD		FY 03	

Compliance with FGDC Standards	Adapt data structures and system data elements.	System Owners	FY 02
Interagency Standards	Agree upon standards the BLM will use with Federal agencies, and state and local governments.	ADs SDs	FY 04
American National Standards Institute (ANSI) Standards	Establish agreed upon multi-agency standards as Federal standards.	AD-IRM Other Agency Officials	FY 04
Compliance with Metadata Standards	Document metadata on collected data.	SDs	FY 02

Goal 2: Enhance the Transformation of Data into Knowledge**Objective 3: Ensure proper handling of the BLM's Official Agency Records.**

Proper information management includes complying with the laws governing federal records. The BLM has a responsibility to its customers, and to the American people, to maintain records of its decisions, deliberations, and relevant correspondence, whether in paper form, automated forms, or any other media. Recent legislation and court decisions have held managers and staff responsible for maintaining and preserving a record of the decisions they make and the basis for them. As an agency that maintains land title information, the BLM is also responsible for ensuring the information is accurate and up to date. The BLM's records managers and administrators can alert managers and staff as to what constitutes the Official Agency Record (OAR) and the criteria used to make such a determination. However, the employee is ultimately responsible for making a determination as to whether a particular record falls into the OAR category. This objective stresses the need for training and alerting the BLM employees as to their responsibilities for good records management.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
Minimal suits for improper records handling and upholding of BLM's rulings when contested before the Interior Board of Land Appeals (IBLA), and in court	Reduce number of law suits due to improper record keeping.	-	Base-line	-10%	-10%
	Percent of Automated systems with approved OARD	base-line	+10%	+30%	+50%
	Management Control Review findings of non-compliance with records policies and guidance	base-line	- 10%	- 20%	- 30%
Product	Action/Method	Responsible Party			Date
Automated Land Records	Implementation of NILS	ADs, SDs, SCIOs			FY 03
Customer use of data used to support BLM's decisions	Provide customers electronic access to public BLM data and records	ADs, SDs, SCIOs			FY 03
Training course materials, lesson plans, training schedules	Develop training to increase the awareness of all BLM employees of their responsibility for records.	ADs SDs			FY 03

Briefing package for managers	Develop a briefing package to increase managers' awareness of the impact of records management on daily work activities.	ADs SDs	FY 02
Satisfactory results from evaluations and follow-up	Perform assessments to ensure compliance as required by law and regulations.	ADs SDs	FY 04
Official Agency Record Designation Document (OARDD)	Monitor compliance for both existing and new systems	WO-560	FY 02
	Prepare and sign designation as official agency records	System Owners	FY 02-05

Goal 2: Enhance the Transformation of Data into Knowledge

Objective 4: Increase access to data and information via the internet to support both internal and external customers.

In the natural resources field, the audience for and the providers of data include not only BLM employees but other Federal agencies, state and local governments, and the private sectors. For data to truly pass between these groups, they need to know how it is defined, the format(s) used, and the methods used to access or transfer the data. This objective builds on the development of data standards described in Objective 2, by publishing BLM's data standards in a Corporate Data Dictionary and establishing agreements with other agencies to use those standards, where appropriate. It also seeks to expand the Corporate Data of BLM by using other agency data standards and databases. (See Goal 3, Objective 5 for providing of information)

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Reduced cost of data collection through the use of other organizations' databases</i>	Increase number of Interagency Data Sharing Agreements for mission critical data	base-line	+10%	+20%	+20%
	Increasing number of Web-based Data sharing procedures.	base-line	25%	50%	100%
Product	Action/Method	Responsible Party			Date
MOUs and MOAs on data collecting and sharing	Expand information collection and sharing partnerships with other agencies, Government, and organizations for specific data themes.	ADs SDs			FY'03
The BLM metadata available to the public	Post metadata on publicly accessible servers.	SDs			FY'02
Public access to the BLM records	Increase the amount of data and information available through BLM's Electronic Reading Rooms.	ADs SDs CDS			FY'02
Catalog of data gathered by other organizations	Develop catalog of data sources and points of contact for access.	AD-IRM SDs			FY'03

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

Objective 1: Improve business operations by thoroughly understanding business needs and by planning, implementing and managing the best information technology solutions available

As business processes become more and more dependent on IT solutions, IT staff must understand the business needs and procedures in addition to the technology. To respond to these needs, a training strategy will be developed using a variety of training techniques and technology to reach as wide an IT audience as possible.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Increased participation of IT staff on business interdisciplinary project teams</i>	Number of interdisciplinary teams IT staff actively participate on	base-line	+10%	+10%	+10%
<i>All CIOs can effectively communicate business needs to IT technical staff</i>	From user feedback, an increase in customer satisfaction	base-line	+10%	+10%	+10%
Product	Action/Method	Responsible Party			Date
Program adopted by the ITIB	Develop a cross-discipline familiarization program, which may include temporary details of IRM staff to jobs outside their discipline	AD-500 AD-700			FY03
Annual user satisfaction survey	Develop and implement an annual questionnaire, based on best practices.	AD-500 AD-800			FY02

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

Objective 2: Recruit and retain skilled IRM personnel competent in both current and emerging technologies.

As part of managing IT assets, the BLM must invest in timely, appropriate, and industry-standard education and training to ensure technical staffs in national and field offices understand and can apply current and future technologies. This strategy involves both a commitment to recruit, train, and retain talented BLM personnel as well as collaborating with other agencies and organizations to fully utilize their talented individuals and share resources wherever possible. Arrangements with other agencies will also be used to share technical personnel in an era of diminishing budgets. The BLM will also stay abreast of emerging trends through an ongoing program of technology evaluation. New technologies will be introduced through pilot projects where both the automation and its business benefits and costs can be evaluated prior to any Bureauwide adoption or full-scale deployment occurs.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Increased availability of IT resources</i>	Average percentage of time national systems are unavailable	2%	1.75 %	1.5%	01.25 %
<i>Increased customer confidence</i>	Customer feedback increases in value	-	base-line	+10%	+10%
<i>Improved performance of IT resources</i>	Length of time to resolve problem	base-line	-20%	-20%	-20%
<i>Skilled IRM support staff to manage and maintain the Bureau's systems</i>	Average length of service once employees are considered 'skilled'	base-line	+5%	+5%	+5%
Product	Action/Method	Responsible Party			Date
IT performance statistics Baseline	Conduct annual study of common IT performance statistics	AD-500			FY02
Implementation of Innovative Personnel Management Practices for IRM staff	Conduct a study of incentives and other new alternative management practices for use in BLM	AD-500 AD-700			FY03
Development of Cross-agency sharing and other IRM efforts	Participate in Department-wide teams that are charged with DOI-wide responsibilities	AD-500			On-going

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

Objective 3: Provide easy to use decision-support tools to all BLM employees that enhance the transformation of data to knowledge

One of the hallmarks of a successful transformation into the 21st century, is the transformation of data into valuable information. As the technological world has matured where a significant number of people have personal computers operating in a graphical environment, the BLM must provide the same ease of use in its attempt to add value to IT investments.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Repeatable results in a decentralized environment</i>	Increase in BLM credibility in decision making from customer feedback	-	base-line	+10%	+10%
<i>Increase in perceived value of IT investments</i>	Value ranking through feedback from internal and external users	-	base-line	+20%	+20%
<i>The BLM is highly regarded for its information and supported by stakeholders</i>	Increase in stakeholder confidence	-	base-line	+10%	+10%
Product	Action/Method	Responsible Party			Date
Web-Based Planning	Establish Planning Guidelines that mandate web-based public involvement processes	AD-200			FY 02
Adaptive Management-based Planning	Establish Planning Guidelines that use Monitoring and Adaptive Management for Plan Maintenance	AD-200			FY 02
Baselined customer feedback on data, information, and knowledge accuracy	Conduct questionnaire sampling of users of the BLM data, information, knowledge, which addresses perceptions of decision-making, accuracy of data, repeatability, etc.	AD-500 AD-800			FY 03

Report on number of legal cases that are based on data interpretation or adequacy issues	Inventory and analyze legal cases.	AD-200 AD-300 AD-500	FY 04
Baselined user feedback on ease-of-use of enterprise applications	Conduct questionnaire of users of BLM enterprise systems using best practices for ease-of-use	All system owners; AD-500 AD-800	FY 03
Training on value chain of data to information to knowledge	Develop a training class on value chain for both employees and managers	AD-500	FY 04

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

Objective 4: Provide vision, leadership, and a framework for evaluating emerging technologies and implementing proven information technology solutions.

In the 21st century, technological change will occur even more rapidly than the recent past. Emerging trends such as 'smart' products, etc., will drive our staff's need to understand these emerging trends and assess these trends for potential applicability to the BLM's work. At the same time, staff will be expected to implement current technological solutions. Without a framework to perform evaluation, implementation of new technologies will be haphazard, expensive, and without full support of the users.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Identification, testing, and implementation of new technologies without significant disruption to BLM's work.</i>	Number of technology upgrades successfully tested	base-line	+15%	+15%	+15%
Product	Action/Method	Responsible Party			Date
Manual/Handbook/Guide	Establish and document standards for evaluation and testing of new technologies	AD-500			FY 03
IRM Research and Development Laboratory	Conduct a study of industry-standard best practices in how to evaluate new technology. The laboratory may be 'virtual' in that small levels of resources are devoted to field use of technology not currently used to determine usefulness, applicability, and necessary changes in both the IRM and business sides of the house.	AD-500			FY03

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

Objective 5: Provide citizens, external customers, and BLM staff with convenient access to appropriate information and services through technology.

IT is the enabler allowing us to provide better, more comprehensive information and services electronically. The BLM is taking action to enhance our E-Government services. Once completed, the manner in which the BLM provides goods and services to the public and how it acquires commercial resources to support its mission will be more efficient and effective. The way employees perform their work may be significantly different through application of technologies already successfully used by commercial organizations. (See Goal 2, Objective 4 for data)

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Make it easier for the BLM offices to meet reporting requirements, while enabling better performance measurement and results, especially for grants. (Government to Government)</i>	Number of E-grants performed	base-line	+25%	+50%	+75%
	Number of thematic layers available for use in Geospatial Information one-stop.	-	1	3	5
<i>Reduced burden on businesses by using Internet protocols and consolidating the myriad of redundant reporting requirements (Government to Business)</i>	Number of systems that are re-using data previously collected.	base-line	20%	40%	50%
	Number of systems that are using ebXML or other open standards to receive transmissions.	base-line	20%	40%	60%
<i>Deployed easy to find one-stop shops for citizens, including single points of easy entry to access high quality government services (Government to Citizen)</i>	Number of systems that are integrated through Firstgov.gov, cross-agency call centers, and offices or service centers.	base-line	20%	40%	60%

<i>Improved performance and reduced cost of Federal government administration by using e-business best practices. (Internal Efficiencies)</i>	Reduce the following using before and after implementation of e-government data: (1) Time to complete an action; (2) BLM cost to perform an action	base-line	-10%	-30%	-50%
Product	Action/Method	Responsible Party			Date
Business processes moved from manual to automated	Structure IT investments to support Government-wide E-Gov initiatives	ITIB			FY 02-05
External electronic access to BLM’s business lines	Develop, within the context of the Government-wide E-Gov initiatives, new systems to provide full electronic access to appropriate BLM business lines.	All ADs			FY 02-05
Implementation or participation in DOI-wide systems: customer relationship, supply chain, enterprise resource, or knowledge management best practices by FY2005	Coordinate with DOI as their Strategic Plan is implemented and provide support as needed. Design, create, and implement systems.	ITIB, All ADs			FY 05
Baseline business line time to delivery and cost studies	For each business line to be offered electronically, collect, using best practices, statistics on time to and cost of delivery.	All ADs			FY 02-03
Systems that are integrated in DOI-wide systems	Increase the number of systems that are integrated in DOI-wide systems: customer relationship, supply chain, enterprise resource or knowledge management best practices	All ADs			FY 02-05
Business lines that are available on businesslaw.gov	Increase the number of business lines that are available on businesslaw.gov	All ADs			FY 02-05
Goal 3: Support the BLM’s Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital					

Objective 6: Operate a reliable communication and computer infrastructure on which to efficiently conduct BLM business operations today and in the future.

As business processes become more and more dependent on IT solutions, IT must provide a platform that is reliable, available to anybody at anytime, is cost effective, and readily modifiable to meet new and unplanned future needs.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>Access to BLM information at anytime from any place</i>	Network performance statistics Time to receive a product from a BLM system	-	base-line	-10%	-20%
Product	Action/Method	Responsible Party			Date
Decision Paper concerning outsourcing computer and communications infrastructure	Form an inter-disciplinary team using cost management methodology to evaluate current and projected costs of acquisition, operations and maintenance of the infrastructure and various organizational alternatives to make BLM more cost efficient	ADs500/800/700			FY03
Baseline of network performance statistics	Document and annually update by use of best practices from private industry and other sources commonly used network performance statistics	AD500			FY03

Goal 3: Support the BLM's Mission by increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital

Objective 7: Develop and maintain a user community that understands and can employ modern technologies to maximize business benefits

Program managers need to be aware of the issues and problems that arise in managing information systems they sponsor. The BLM employees need to become familiar not only with how to use the technologies, but with their responsibilities as information collectors and providers. To respond to these needs, a training strategy must be developed using an appropriate mix of training techniques and technology to reach as wide an audience as possible. This objective involves an examination of current business processes to determine what steps could be made to make them more efficient. To lower the cost of doing business, the BLM needs to examine whether technology provides solutions that enable its employees to operate both smarter and more efficiently.

Outcome	Performance Measure	FY 2002 goal	FY 2003 goal	FY 2004 goal	FY 2005 goal
<i>More efficient work processes</i>	Cost of overall work process	-	base-line	-10%	-15%
	Time to deliver work product	-	base-line	-10%	-20%
<i>More effective knowledge management</i>	Average level of knowledge and application of proper information management techniques	-	base-line	+10%	+10%
Product	Action/Method	Responsible Party			Date
Core competencies assessment	Identify core IRM competencies for employees and managers and assess deficiencies.	ADs			FY 02-04
Training course/ applications training courses	Train BLM employees and managers to achieve core IRM competencies.	ADs SDs			FY 05

APPENDIX A:

ORGANIZATIONAL STRUCTURE

BLM'S ORGANIZATION

The BLM offices are organized to provide on-site service in a responsive and timely manner. The BLM's organizational structure focuses on supporting on-the-ground managers:

- The 12 BLM State Offices provide regional coverage for the states under their jurisdiction, serving as the support arm for 257 field offices. The State Offices are divided as follows:
 - ▶ Seven State Offices managing activities in one state only (AK, AZ, CA, CO, ID, NV, UT)
 - ▶ Five State Offices managing activities in several states:
 - MT covers the states of MT, ND, and SD
 - OR covers the states of OR and WA
 - WY covers the states of WY and NE
 - NM covers the states of NM, TX, OR, and KS
 - Eastern States Office covers activities in the remaining 31 states
- The Headquarters organization is responsible for policy, guidance, and overall direction for the land and resource programs of the BLM.
- The National Centers (NARSC, NBC, NHRMC, NIRMC, and NTC), are responsible for providing technical assistance, management control, and guidance to the field in the performance of their duties.
- The National Interagency Fire Center (NIFC), located in Boise, Idaho, is the Headquarters for the BLM's Fire and Aviation. NIFC is a multi-agency center coordinating and directing wildland fire fighting activities throughout the United States. NIFC supports fire management efforts including fire control, fire logistics, and aviation management not only for the BLM, but for other Federal, State and local agencies.

IRM ORGANIZATION

The IRM structure within the BLM parallels the organizational structure identified above:

- The Assistant Director for IRM (AD-IRM), serves as the BLM's CIO. The CIO is responsible for advising the Director on, and ensuring effectiveness of the BLM's IT and

IRM processes. This is achieved by monitoring and evaluating the performance of IT programs and assessing the skills the BLM possesses in information resources management.

- The BLM field offices have an IRM support staff under the direction of the CIO in the State Office.
- The IRM Headquarters provides overall guidance and policy on records administration, IRM security, management of Washington Office (WO) records, information access, data administration, IRM investment management and related functions. The staff is located in Washington, D.C., and Denver, Colorado.
- The National IRM Center (NIRMC) in Denver, Colorado, provides centralized services for the BLM in systems development, testing facilities, operations and maintenance, and technical expertise to the field for automated information systems. They are also responsible for supporting the BLM's IT infrastructure. In addition, NIRMC serves as the project office for the technical management of the BLM's telecommunications network.

IRM Responsibilities and Authorities

The AD, IRM, is responsible for maintaining the BLM IRM Strategic Plan. The other Assistant Directorates are responsible for components of the IRM Strategic Plan as it affects their mission areas. Legislation affecting information resources management, particularly the Information Technology Management Reform Act (ITMRA) of 1996, as amended; Paperwork Reduction Act of 1994, as amended; Freedom of Information Act (FOIA); and Privacy Act, provide specific requirements for information management in Federal agencies. The BLM's ITIB, representing BLM high-level managers, plays a direct role in the decisions affecting information resources. The Associate State Directors provided input into the development of this Strategic Plan and are responsible for its implementation in their States.

The Role of BLM's CIO

Oversight of IRM, throughout the BLM, rests with the AD, IRM. He/she is a member of the Corporate Team reporting to the Director and Deputy Director and functioning as the CIO for the BLM. The Clinger-Cohen Act outlines the duties of the CIO:

- to advise senior management on all aspects of information technology planning and implementation;
- to assess the information needs of the organization;

- to advise management on the acquisition of information technology and develop strategies to acquire the appropriate information technology tools to respond to the agency's needs;
- to ensure that trained and skilled technology personnel are retained to support the information technology infrastructure;
- to determine what opportunities exist to share information resources, especially with other agencies;
- to determine how information can be made available and accessed by the public;
- to ensure managers and personnel are trained to use information technology;
- to appropriately monitor and allocate IT funding within the BLM;
- to evaluate IT program performance and compliance with the BLM's policies and laws and regulations, and
- to develop policies, handbooks, and guidelines for appropriate management of IT resources for the BLM.

Additionally, as derived from OMB Circular A-130, the CIO has the responsibility to:

1. Be an active participant during all BLM strategic management activities, including the development, implementation, and maintenance of agency strategic and operational plans;

(b) Advise the Director on information resource implications of strategic planning decisions;

(c) Advise the Director on the design, development, and implementation of information resources.

(i) Monitor and evaluate the performance of information resource investments through a capital planning and investment control process, and advise the agency head on whether to continue, modify, or terminate a program or project;

(ii) Advise the Director on budgetary implications of information resource decisions; and

(d) Be an active participant throughout the annual BLM budget process in establishing investment priorities for agency information resources.

2. Monitor the BLM compliance with the policies, procedures, and guidance in OMB Circular A-130. Acting as an ombudsman, the CIO must consider alleged instances of the BLM failure to comply with the Circular, and recommend or take appropriate corrective action.

APPENDIX B:

DEFINITIONS

Terms used in this document are defined in accordance with the OMB Circular A-130, November 30, 2000:

<i>Capital planning and investment control process</i>	A management process for ongoing identification, selection, control, and evaluation of investments in information resources. The process links budget formulation and execution, and is focused on agency missions and achieving specific program outcomes.
<i>Dissemination</i>	The Government initiated distribution of information to the public. Not considered dissemination within the meaning of this Circular is distribution limited to Government employees or agency contractors or grantees, intra- or inter-agency use or sharing of Government information, and responses to requests for agency records under the Freedom of Information Act (5 U.S.C. 552) or Privacy Act.
<i>Geographic Information System</i>	A computer system for capturing, storing, checking, integrating, manipulating, analyzing and displaying data related to positions on the Earth's surface. Typically, a GIS is used for handling maps of one kind or another. These might be represented as several different layers where each layer holds data about a particular kind of feature (e.g. roads). Each feature is linked to a position on the graphical image of a map.
<i>Information</i>	Any communication or representation of knowledge such as facts, data, or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms.
<i>Information Management</i>	The planning, budgeting, manipulating, and controlling of information throughout its life cycle.
<i>Information Resources</i>	Both Government information and information technology.
<i>Information Resources Management</i>	The process of managing information resources to accomplish agency missions. The term encompasses both information itself and the related resources, such as personnel, equipment, funds, and information technology.

<i>Information System</i>	A discrete set of information resources organized for the collection, processing, maintenance, transmission, and dissemination of information, in accordance with defined procedures, whether automated or manual.
<i>Information system life cycle</i>	The phases through which an information system passes, typically characterized as initiation, development, operation, and termination.
<i>Information Technology</i>	Any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by an executive agency. For purposes of the preceding sentence, equipment is used by an executive agency if the equipment is used by the executive agency directly or is used by a contractor under a contract with the executive agency which (i) requires the use of such equipment, or (ii) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. The term "information technology" includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. The term "information technology" does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract. The term "information technology" does not include national security systems as defined in the Clinger-Cohen Act of 1996 (40 U.S.C. 1452).
<i>Major Information System</i>	An information system that requires special management attention because of its importance to an agency mission; its high development, operating, or maintenance costs; or its significant role in the administration of agency programs, finances, property, or other resources.
<i>Records</i>	All books, papers, maps, photographs, machine-readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of the data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and of processed documents are not included. (44 U.S.C. 3301)

*Records
Management*

The planning, controlling, directing, organizing, training, promoting, and other managerial activities involved with respect to records creation, records maintenance and use, and records disposition to achieve adequate and proper documentation of the policies and transactions of the Federal Government and effective and economical management of agency operations. (44 U.S.C. 2901(2))

APPENDIX C:

GLOSSARY OF ACRONYMS

ABC	Activity Based Costing
AD	Assistant Director
BEA	Bureau Enterprise Architecture
BLM	Bureau of Land Management
CD	Center Director
CFO	Chief Financial Officer
CIO	Chief Information Officer
CM	Configuration Management
COOP	Continuity of Operations Plan
DOI	Department of Interior
FOIA	Freedom of Information Act
FOM	Field Office Manager
GAO	Government Accounting Office
GIS	Geographic Information System
GPRA	Government Performance and Results Act
IRM	Information Resources Management
IT	Information Technology
ITIB	Information Technology Investment Board
ITMRA	Information Technology Reform Act
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
OARDD	Official Agency Record Designation Document
OIRM	Office of Information Resources Management (Department of Interior)
PA	Privacy Act
ROI	Return on investment
SEI	Software Engineering Institute of Carnegie-Mellon University
SD	State Director
TRM	Technical Reference Model
WO	Washington Office